SUPPORT FOR THE AMENDMENT

This Amendment amends Claims 4-11. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 4 is found in the specification at least at page 26, line 4. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 1-11 will be pending in this application. Claims 1 and 4 are independent. Claims 7-11 are withdrawn from consideration pursuant to our Restriction Requirement.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

Applicants thank the Examiner for the courtesies extended to their representative during the June 27, 2007 personal interview.

As discussed at the personal interview, the present invention relates to an Al-Mg-Si alloy sheet in which ridging marks are noticeably prevented from being produced particularly during press forming. Specification at page 1, lines 7-10.

Claims 1-6 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,231,809 ("US-809"). Claims 1-6 are also rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,334,916 ("US-916").

Any *prima facie* case of obviousness based on US-809 or US-916 is rebutted by the significant reduction in ridging that is achieved by the present invention in accordance with the invention of independent Claim 1 when

"([Cube] + [CR] + [RW] + [Goss] + [Brass] + [S] + [Cu] + [PP])/8 $\leq$ 1.0 (%)"

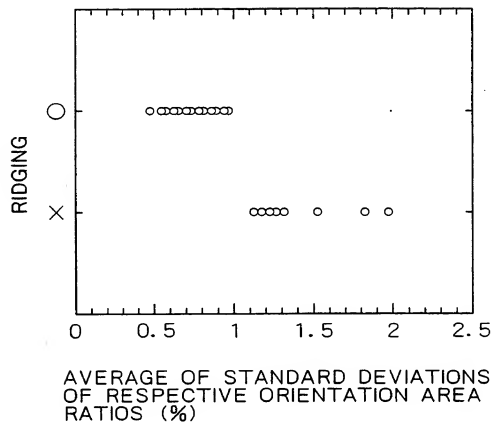
(i.e., the average standard deviation of the area ratio for eight orientations is $\leq$ 1.0%); and

in accordance with the invention of independent Claim 4 when "the average value of the crystal sizes along the sheet thickness direction of textures of respective orientations is 50 μm or less". This is demonstrated in the specification at Table 1 and Fig. 2, both reproduced below.

Table 4

Alloy No.	Crystal size along sheet thickness direction before cold rolling (μm)	Standard deviation average (%)	Ridging
1	46	0.91	○
2	48	0.98	○
3	38	0.75	○
4	40	0.67	○
5	45	0.87	○
6	41	0.72	○
7	37	0.59	○
8	47	0.95	○
9	30	0.48	○
10	33	0.55	○
11	43	0.79	○
12	44	0.83	○
13	39	0.64	○
14	65	1.53	×
15	90	1.84	×
16	54	1.27	×
17	127	1.98	×
18	72	1.18	×
19	76	1.23	△
20	80	1.33	×
21	68	1.17	△
22	71	1.46	×
23	84	1.77	×
24	58	1.32	×
25	141	1.83	×
26	69	1.39	×
27	91	1.12	△
28	59	1.11	△

FIG. 2



In Table 4 and FIG. 2, the mark × denotes the case where the production of ridging marks was observed; the mark ○ represents the case where no production of ridging marks was observed; and the mark △ represents a case where ridging marks cannot be said to have been produced, but surface roughness was observed. Specification at page 25, lines 1-5.

Table 4 and FIG. 2 show that a significant reduction in ridging results when the average of the standard deviation of the area ratios of eight different orientations is $\leq 1.0\%$. Table 4 also shows that a significant reduction in ridging occurs when in an intermediate material the average value of the crystal size is along the sheet thickness direction of textures of respectable orientation is 50 μm or less. See specification at page 25, lines 6-13 and page 26, lines 2-13. Furthermore:

> When the average value of the size along the sheet thickness direction of each crystal orientation texture after the intermediate annealing immediately before the cold rolling step or during the cold rolling is set at 50 μm or less, it is possible to inhibit the production of the ridging marks in a final aluminum alloy sheet. In other words, if the average value at this time point is determined, it is possible to predict the properties of the final alloy sheet . . . Specification at page 15, lines 11-18.

US-809 discloses that ridging marks are restrained from aluminum alloy sheet when the orientation distribution density of Goss orientation is 3 or lower, orientation distribution density of PP orientation is 3 or lower and orientation distribution density of Brass orientation is 3 or lower. US-809 at Abstract. US-809 also discloses that certain dispersoids are effective in making "grains finer". US-809 at column 4, lines 4 and 56.

However, US-809 is silent about the standard deviation of the area ratio for any orientation and is silent about independent Claim 1's average standard deviation of the area ratios of eight orientations, which leads to reduced ridging when $\leq$ 1.0%. US-809 is also silent about any specific grain size and silent about independent Claim 4's crystal sizes of 50 μm or less, which lead to reduced ridging.

US-916 discloses an Al-Mg-Si based alloy in which the ratio of orientation density of Goss orientation to the orientation density of the Cube orientation (Goss/Cube) is sent to 0.3 or less, and a grain size is set to 80 μm or less. US-916 at Abstract.

Note that US-916 uses the designation "[Cube]" to designate Cube orientation density. US-916 at column 2, lines 21-26. In contrast, the term "[Cube]" is defined in independent Claim 1 as the standard deviation (%) of the area ratio of the Cube orientation in a sheet cross section every 500 μm along the sheet width direction.

US-916 discloses that the grain size is preferably 80 μm or less from the standpoint of prevention of intergranular fracture. US-916 at column 5, lines 1-5.

However, US-916 is silent about the standard deviation of the area ratio for any orientation and is silent about independent Claim 1's average standard deviation of the area

ratios of eight different orientations, which leads to reduced ridging when $\leq 1.0\%$. In addition, US-916 is silent about ridging and is silent about the reduction in ridging that is achieved by independent Claim 4 when "the average value of the crystal sizes along the sheet thickness direction of textures of respective orientations is 50 μm or less".

Because the cited prior art fail to suggest the significant reduction in ridging achieved in accordance with independent Claims 1 and 4, any *prima facie* case of obviousness based on the cited prior art is rebutted. Thus, Claims 1-6 are not obvious over US-809 or US-916. Therefore, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

Pursuant to MPEP 821.04, after independent product Claims 1 and 4 are allowed, Applicants respectfully request rejoinder, examination and allowance of withdrawn method Claims 7-11, which include all of the limitations of product Claims 1 and 4, respectively.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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